



# **Accelerated Learning Development**

**By**

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## Introduction

Learning disorders --- how, why

Tests on identifying difficulties

## BILD

Sensory Integration Programme

Assessing children using

## SCIST

## TVPS-R

## VMI

## WISC

Once a diagnosis is obtained and scores of their learning capabilities are ascertained, an individual learning development plan (ILDLP) is drafted for each child.

The programme works on developing a child's foundational, or lower level, sensory systems. EXPLAIN

The development of the neurophysiological abilities is foundational to academic development. Children should be encouraged and guided to develop these pre-academic and fundamental neurophysiological abilities before tackling the higher level skills of writing and mathematics.

## Theoretical Background

## Methodology

## Describe British Institute

## Instruments Used for Data Collection

### List Tests

## **VMI - Beery**

The Beery VMI tests have been established since 1961 as a remarkably stable and reliable indicator of children's visual motor integration skills. The Beery VMI was specifically designed to measure changes in eye-hand coordination as children grow older. Gross motor, fine motor, visual and visual-motor development are important for developing academic abilities, particularly with reading, writing, mathematics and comprehension, but the development of these neurophysiological abilities also affect skills in a wide range of other sport, dance, art and intellectual activities. The development of neurophysiological abilities is considered foundational to the development of academic skills. Children learn and development through the processing of information received and processed from their sensory systems. Young children tend to learn particularly through their motor systems, thus, lots of play and general activity stimulates the development of neurophysiological foundations on which all other learning will be dependent.

The Beery VMI test scheme is developmental. Thus the results from tests are to be scaled against chronological age. As children get older, so their raw test scores increase but are standardized against a normal development range of a 100 average in order to scale the development of a child against a norm.

The Beery VMI and its supplemental tests are related to each other because each supplemental test measures a part of what the Beery VMI measures. Each of the supplemental tests measures a part of what the Beery VMI measures (Beery 1997:106)

The Beery VMI tests are not biased with regard to gender, ethnicity, socioeconomic status, and residence. Sample tests have been carried out throughout the world to validate the universality of the Beery VMI with great success. (Beery 1997:115-116)

The Beery VMI and its supplemental tests are related to the nonverbal aspects of intelligence, as measured, for example, by the WISC tests. Thus, results from VMI tests will correlate well with nonverbal intelligence test results. (Beery 1997:106, 110)

While the Beery VMI correlates well intelligence, it is a more sensitive index for measuring some physiological/neurophysiological problems in child development. (Beery 1997:111)

The Beery VMI and its supplemental tests are related to academic achievement. Thus, the results from the tests will correlated well with academic achievement results. (Beery 1997:106)

The Beery VMI can be used to predict academic achievement from an early age and specifically predict problems that are likely to arise with reading, writing and mathematics in later years. (Beery 1997:114) Thus, the VMI developmental scheme can be graphed to reveal a 'life-script' of predicted score outcomes through the course of a child's development.

## **Test of Visual-Perception Skills = Revised TVPS-R**

The RVPS-R visual perception test seeks to determine a person's visual-perception strengths and weaknesses based on non-motor visual-perception testing. The test reveals how a person perceives various forms within a specific category and the way these forms are interpreted. (Gardener 1996:7)

Visual perception is the capacity to interpret or give meaning to what is seen and includes recognition, insight and interpretation at the higher levels of the central nervous system of what is seen. (Boktenica 1968) The TVPS-R has the advantage of particularization of many areas that have generally been included under the general term of ;visual perception. The TVPR-S measures seven visual-perceptual skills: visual discrimination, visual memory, visual spatial-relationships, visual form-constancy, visual sequential-memory, visual figure-ground, and visual closure.

Visual perception, while not measuring sight, does measure what a person does with what he or she sees. Gardener says, “the term ‘visual perception’ in a broad sense is the ability of the brain to understand and interpret (make sense of) what the eyes see; and based on understanding and interpretation, it is the ability to express the meaning verbally or motorically.” (Gardener 1996: 8)

The TVPS-R is a non-language test and is not biased according to ethnicity, culture, education or gender. The TVPS-R test is developmental and measures a child's progressive abilities against a standardized scale scored normal of average development, where a standardized score of 100 is considered the average.

The TVPS-R is an indicator of how a child is perceiving and interpreting the world around them, including their academic tasks. Visual-perception has a direct impact on essential academic areas of reading, writing, comprehension and reasoning. The TVPS-R shows areas of visual-perception that are functioning adequately and areas of dysfunction and helps therapists and teachers design their learning schemes to stimulate development.

SCIST - Clinical Observations

WISC

Research Findings

The numbers/charts

Discussion of Results

VMI

Normal Development

Ethnic

Age

Who has Learning Difficulties

Value of Tests

Intelligence

Predictability

Outcomes

BILD Results

Accelerated Learning Scheme

The VMI Tests give a student a raw score (eg 18/27) and this raw score is translated into a Standard Score correlated to the students age. A 9 year old who scored 18 on the test would get a Standard Score of 95. The following year, when he was aged 10, he would have to get a raw score of 19. And at age 11, a raw score of 20. These raw scores maintain his VMI Standard Score of 95.

For a child to increase their Standard Score in a year requires the child to jump, or accelerate, their raw score above the expected 15% annual-natural increase in ability.

Age 8-2 Raw Standard Score 90 Raw Score 15

Age 9-4 Raw Standard Score 90 Raw Score 17 - required to maintain St-Score of 90

Age 9-4 Raw Standard Score 102 Raw Score 20 - tested result

This child has progressed beyond his predicted score-ability pathway and accelerated into a higher ability/intelligence stream.

The VMI Tests are developmental - and, on average, children increase their raw score-ability by 15-20% per year in order to

Children with learning difficulties

## Summary and Conclusion

### References

Beery, K. E. (1997) The Beery-Buktenica Developmental Test of Visual Motor Integration (VMI), Modern Curriculum Press, New Jersey.

Gardener, M.F. (1996) Test of Visual-Perception Skills (n-m) Revised TVPS-R; Academic Therapy Publications, USA.

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